

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/401,872	09/23/1999	RICHARD G. KETCHUM	09857/027001	5263	
26161	7590 01/14/2005		EXAM	EXAMINER ·	
FISH & RICHARDSON PC			SUBRAMANIAN, N	SUBRAMANIAN, NARAYANSWAMY	
225 FRANKI BOSTON, M			ART UNIT PAPER NUMBER		
,			3624		
			DATE MAILED: 01/14/200	DATE MAILED: 01/14/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE



COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450
www.uspio.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/401,872 Filing Date: September 23, 1999 Appellant(s): KETCHUM ET AL.

Denis G. Maloney (Reg. No. 29,760)

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 14, 2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The appellant's statement identifying the related appeals and interferences contained in the brief is correct.

(3) Status of Claims

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 1 and 10 have been amended subsequent to the final rejection.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect. The amendments after final rejection filed on April 15, 2004 and amendments in the current communication have been entered. The amendments include amendments to claims 1 and 10 and cancellation of claims 2, 11 and 25-49.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1, 3-10 and 12-24 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,278,982 B1	KORHAMMER et al	8-2001
5,297,031	GUTTERMAN et al	3-1994
6,195,647 B1	MARTYN et al	2-2001
6,408,282 B1	BUIST	6-2002

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

- (a) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- (b) Claims 1, 3-10, 14-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korhammer et al (US Patent 6278982) in view of Gutterman et al (US Patent 5297031).

With reference to claim 1, Korhammer teaches a system for trading of securities comprising: a plurality of client stations for entering quotes for securities (See Korhammer Column 2 lines 30-35); and a server process that receives quotes from the clients (See Korhammer Column 2 lines 30-38 and Column 4 lines 14-36), aggregates the quotes and causes the aggregated quotes to be displayed for a plurality of price levels and other attributes desired

by the customer on the client systems. (See Korhammer Column 4 lines 14-36). The term "system" is interpreted to include the electronic market and the term "desired attributes" is interpreted to include the total of all aggregated quotes. Totaling the quotes for each price level is inherent in the system and hence not explicitly illustrated in the reference.

Korhammer fails to explicitly teach the step of a current quote window to be displayed in proximity to the aggregated quotes window of a graphical user interface.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

Both Korhammer and Gutterman are concerned with the problem of providing the users with information about trading of securities. It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman to the disclosure of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited from having a better feel for the market by having the current quote window in proximity to the aggregate window.

With reference to claim 3, Gutterman teaches the step wherein the incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the

deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

With reference to claim 4, Korhammer teaches a system of claim 1 wherein the plurality of price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

With reference to claim 5, Korhammer teaches a system of claim 1 wherein the aggregate window displays aggregate interest for both sides of a market. (See Korhammer Column 8 lines 61-68).

With reference to claim 6, Korhammer teaches a system of claim 1 which includes a process to update the aggregate window. (See Korhammer Column 9 lines 27-44).

With reference to claims 7-9, Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

With reference to claim 10, Korhammer teaches a computer network for trading products comprising an aggregate window having a first plurality of indicators that displays totals of aggregated interest of a second plurality of market participants that exists in the electronic market at each of a third plurality of price levels of a product traded in the market. (See Korhammer Col 6 line 51 – Col 7 line 14) The step of totaling for a group of market participants

Application/Control Number: 09/401,872

Art Unit: 3624

is inherent is the disclosure, market makers are interpreted to include a second plurality of market participants and the computer network includes a graphical user interface for an electronic market.

Korhammer fails to explicitly teach the step of a current quote window to be displayed in proximity to the aggregated quotes window.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

Both Korhammer and Gutterman are concerned with the problem of providing the users with information about trading of securities. It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman to the disclosure of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited from having a better feel for the market by having the current quote window in proximity to the aggregate window.

With reference to claims 14 and 15, Korhammer teaches a computer network for trading products in claim 10 as discussed above. (See Korhammer Column 4 lines 19-36 and Col 6 line 51 – Col 7 line 14). The computer network includes a graphical user interface for an electronic market and the price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

Korhammer fails to teach the step the aggregated quotes including the two next best price levels besides the inside market quote.

Page 7

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

Both Korhammer and Gutterman are concerned with the problem of providing the users with information about trading of securities. It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combined disclosure suggests that by having the information about the aggregated interest immediately at and around the inside market quote on the same screen, investors have a better feel for the immediate demand and supply for a given security and it would help them decide on which side of the market they want to be.

With reference to claims 16 and 17, Korhammer teaches a method of operating an electronic market for trading products including aggregating and displaying information on a product and sorted by price levels, volume and other attributes desired by the customer. (See Korhammer Column 4 lines 19-36) The desired attributes are interpreted to include non-attributable interest in a product also and totaling is inherent in the disclosure.

With reference to claim 19, Korhammer teaches a method of claim 17 wherein the price levels are dynamically changeable depending on market conditions. (See Korhammer Column 8 lines 63-67 and Column 9 lines 19-26).

With reference to claims 18, 20 and 21, Korhammer teaches a method of claims 16 and 17 as discussed above. (See Korhammer Column 4 lines 19-36) The desired attributes are interpreted to include non-attributable interest in a product also, the step of totaling is inherent in the system and the electronic market that includes computer network for trading products includes the graphical user interface also.

Korhammer fails to teach the steps of: displaying the quotes corresponding to inside quote and the two next best price levels and displaying a window for aggregate data and a window for current quote in proximity to the aggregate window.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51). The price levels are interpreted to include the inside market price also.

Both Korhammer and Gutterman are concerned with the problem of providing the users with information about trading of securities. It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would

Application/Control Number: 09/401,872 Page 9

Art Unit: 3624

have benefited from having a better feel for the market by having the current quote window in proximity to the aggregate window. This combination would have also helped them place their orders in a timely manner and thereby take advantage of market changes in the short run. The combined disclosure also suggests that by having the information about the aggregated interest immediately at and around the inside market quote on the same screen, investors have a better feel for the immediate demand and supply for a given security and it would help them decide on which side of the market they want to be.

With reference to claim 24, Korhammer teaches a consolidating computer system for use in trading a product and providing aggregate data on a product sorted by a plurality of price levels, volume and other attributes desired by the customer. (See Korhammer Column 4 lines 19-36) The other desired attributes are interpreted to include aggregate non-attributable interest in a product, totaling of interest is inherent in the disclosure and the consolidating computer system includes a computer program product residing on a computer readable media.

©. Claims 12, 13, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korhammer et al (US Patent 6278982) in view of Gutterman et al (US Patent 5297031) and further in view of Martyn (US Patent 6195647).

With reference to claims 12 and 13, Korhammer teaches a Graphical User Interface for trading products including an aggregate window that displays aggregated quotes for a plurality of price levels of a product traded in the market. (See discussion of claim 10 above). The desired attributes are interpreted to include attributable and non-attributable quotes for each price level and totaling is inherent in the disclosure of Korhammer.

Korhammer fails to explicitly teach the steps of: displaying adjacent to the aggregate interest window a current quote window that are attributable quotes and a special quote that represents total aggregate non-attributable quotes at a current market level.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level including the current market level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

Both Korhammer and Gutterman are concerned with the problem of providing the users with information about trading of securities. It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and act on their analysis quickly.

Both Korhammer and Gutterman fail to teach the step of including the negotiable quotes of participants in the current quote window.

Martyn teaches the step of allowing the users to input their negotiation quote in a window of their trading terminal. (See Martyn Abstract and Column 9 lines 24-28).

Korhammer, Gutterman and Martyn are concerned with the problem of providing the users with information about trading of securities. It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman and Martyn in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and put in their negotiable orders quickly.

With reference to claims 22 and 23, Korhammer teaches a method of claims 16 and 17 as discussed above. The desired attributes are interpreted to include separately attributable and non-attributable interest in a product also and totaling is inherent in the disclosure.

Korhammer fails to teach the steps of: displaying adjacent an aggregate window a current quote window that may have negotiable quotes of participants in the system and a special quote representing total aggregate quotes at a current market level displayed in the aggregation window.

Gutterman teaches a display screen containing several panes for order management. (See Gutterman Column 10 lines 20-33). The panes are interpreted to include windows also. The incoming order pane, displays the total number of incoming orders at each price level. (See Gutterman Column 10 lines 39-47 and Column 12 lines 44-50). The market pane is interpreted to include current quotes and the deck pane includes the aggregate quotes for each price level including the current market level. (See Gutterman Column 11 lines 57-68 and Column 12 lines 44-51).

Both Korhammer and Gutterman are concerned with the problem of providing the users with information about trading of securities. It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and act on their analysis quickly.

Both Korhammer and Gutterman fail to teach the step of including the negotiable quotes of participants in the current quote window.

Martyn teaches the step of allowing the users to input their negotiation quote in a window of their trading terminal. (See Martyn Column 9 lines 24-28).

Korhammer, Gutterman and Martyn are concerned with the problem of providing the users with information about trading of securities. It would have been obvious to one with ordinary skill in the art at the time of invention to include the teachings of Gutterman and Martyn in the invention of Korhammer. The combination of the disclosures taken as a whole suggests that customers would have benefited by consolidating all the relevant market information in various windows on the same screen. The combination would also permit them to analyze the markets in a timely manner and put in their negotiable order quickly.

(11) Response to Argument

With reference to claim 1, the Appellant's arguments about anticipation under 35 U.S.C. 102, is most because of the new grounds of rejection. New grounds of rejection were necessitated by amendments to claim 1 after the final rejection.

In response to applicant's argument about obviousness, that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation provided in the rejections would have been obvious to one with ordinary skill in the art.

With respect to the step of totaling quotes the step of totaling quotes at each price level and displaying these totals, this step is old and well known in the art. Hence it is not explicitly illustrated in the references that deal with quotes in a market system. To support this position Applicants are referred to Figure 6 of Buist (US Patent 6,408,282 B1). Buist has not been relied upon for rejecting any of the examined claims.

In response to applicant's argument that Korhammer does not teach attributable and non-attributable quotes, the term "quotes" as used in Korhammer refers to the "genus" of which attributable and non-attributable quotes are species. In Korhammer's invention a distinction of the various species of the same genus was not necessary and hence particular references to these quotes were not made in the invention. However the terms attributable and non-attributable quotes are inherent in the disclosure of Korhammer.

In response to applicant's argument that Gutterman does not discuss or suggest the use of quotes, the Examiner respectfully disagrees. Gutterman teaches orders, which are nothing but quotes. For instance an order to buy a share of ABC for \$100, represents a quote to a seller who

wishes to sell a share of ABC. Hence Gutterman does discuss or suggest the use of quotes and hence there is a motivation to combine Gutterman with Korhammer.

In response to applicant's argument regarding claims 4 and 15, that the Korhammer reference fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e.," a predetermined number of price levels that are dynamically changeable based on market conditions") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Also Gutterman teaches orders at a plurality of price levels, which are nothing but quotes. For instance an order to buy a share of ABC for \$100 represents a quote to a seller who wishes to sell a share of ABC. These orders change with market conditions and hence are dynamic depending on market conditions. Hence both Korhammer and Gutterman taken separately teach the limitations of this claim.

In response to applicant's argument regarding claim 7, the term "quotes" as used in Korhammer refers to the "genus" of which attributable and non-attributable quotes are species. In Korhammer's invention a distinction of the various species of the same genus was not necessary and hence particular references to these quotes were not made in the invention. However the terms attributable and non-attributable quotes are inherent in the disclosure of Korhammer.

In response to applicant's argument regarding claims 10, 12, 14 and 24, the Appellant is respectfully directed to the discussion and response to arguments of claim 1 above.

Application/Control Number: 09/401,872 Page 15

Art Unit: 3624

In response to applicant's argument regarding claim 13, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. special quote is the SIZE quote) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument regarding claim 16, the term "quotes" as used in Korhammer refers to the "genus" of which attributable and non-attributable quotes are species. In Korhammer's invention a distinction of the various species of the same genus was not necessary and hence particular references to these quotes were not made in the invention. However the terms attributable and non-attributable quotes are inherent in the disclosure of Korhammer.

In response to applicant's argument regarding claims 17, 18 20 and 23, the Appellant is respectfully directed to the discussion and response to arguments of claims 16 and 1 above.

In response to applicant's argument regarding claims 19, 21 and 22, the Appellant is respectfully directed to the discussion and response to arguments of claims 4 and 15 above.

For the above reasons, it is believed that the rejections should be sustained.

Application/Control Number: 09/401,872

Art Unit: 3624

Respectfully submitted,

Narayanswamy Subramanian Examiner Art Unit 3624

December 20, 2004

Conferees

VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Vincent Millin, SPE, Art Unit 3624

Joseph Thomas SPE, Art Unit 3626

Vines Milli